WHAT IS CLAIMED IS:

1.   An arrangement for processing data in a telecommunications network, comprising one or more network elements (10)-(12), and operational support systems (7)-(9), characterized in that the arrangement further comprises a data processing network element (13), so that

-       the network elements (10)-(12) produce the event data and deliver this data as input signal data to the data processing network element (13), and that

-       the data processing network element (13) processes the inputted data and generates an output signal data towards the different operational support systems (7)-(9), the arrangement being further characterized in that the data processing components of the data processing network element (13) have a generic component interface and that the arrangement has a flexible architecture for combining the data processing components together, where the data processing components are linked together at the startup-time of the telecommunications data processing arrangement.

2.   A telecommunications data processing arrangement according to Claim 1, characterized in that at the start-up of the data processing arrangement there is processed a component link-up configuration file (16), which dictates the internal build-up of the data processing components within the data processing arrangement.

3.   A telecommunications data processing arrangement according to Claim 1 or Claim 2, characterized in that the data processing components are

linked together at the run-time of the telecommunications data processing arrangement.

4.   A telecommunications data processing arrangement according to Claim 3, characterized in that there is an external signal sent to the

5   telecommunications data processing arrangement when the component link-up configuration file (16) needs to be re-read.

5.   A telecommunications data processing arrangement according to Claim 1 or Claim 3, characterized in that the data processing arrangement is designed so that a new data processing component can easily be added.

10   6.   A telecommunications data processing arrangement according to Claim 5, characterized in that the components are listed in one or more component galleries based on the component name.

7.   A telecommunications data processing arrangement according to any of the claims 1, 3, 5 or 6, characterized in that the validity of a component

15   link-up is checked based on the properties of the components in question.

8.   A telecommunications data processing arrangement according to Claim 1 or Claim 3, characterized in that the data processing network element (13) is co-located with one network element (11).

9.   A telecommunications data processing arrangement according to

20   Claim 1 or Claim 3, characterized in that the data processing network element (13) has

- a database (15), into which the incoming input (14) is stored until it is processed,

- a configuration file (16), and

- a data processing application (17), which will use the incoming

5   input (14) from the database (15) and the information from the configuration file (16) of the application to process the data and to generate an output signal (18) towards the operational support system applications.

10.   A telecommunications data processing arrangement according to

10   Claim 1, Claim 3 or Claim 9, characterized in that in the arrangement there are three types of components:

- producer data processing components (19), (20), which communicate with an external entity, are used for receiving input, and which produce data towards the producer/consumer data

15   processing components (21)-(24),

- producer/consumer data processing components (21)-(24), which consume data internally to the system, and produce a transformed form of that data towards the consumer data processing components (25)-(27),

20   -   consumer data processing components (25)-(27), which communicate with an external entity for the delivery of the output data.

11.   A telecommunications data processing arrangement according to any of the claims 1, 3, 9 or 10, characterized in that the generic data processing

25   component interface consists of adapters that are the interface between the

different data processing components and accomplish the connection between them.

12. A telecommunications data processing arrangement according to Claim 11, characterized in that the adapters can cross boundaries between process and machines when necessary.

13. A telecommunications data processing arrangement according to Claim 11, characterized in that the generic data processing component interface further comprises a configuration change support arrangement, which is used to prevent old type of data being mixed with new type of data.

14. A telecommunications data processing arrangement according to Claim 11 or Claim 13, characterized in that the generic data processing component interface further comprises a synchronization support arrangement, which sends a signal to a component producing the data, when a components cannot handle the datarate.

15. A telecommunications data processing arrangement according to Claim 11, Claim 13 or Claim 14, characterized in that the generic data processing component interface further comprises a check/back-up support arrangement, in which every data processing component registers with a checkpoint component and feeds the checkpoint component on a regular basis with information stating which data the data processing component has processed and safely passed on to the next component.

16.   A telecommunications data processing arrangement according to any of the preceding claims 1-15, characterized in that data processing software components are located in a same process on the same computer.

5   17.   A telecommunications data processing arrangement according to any of the preceding claims 1-15, characterized in that data processing software components are located in multiple processes on the same computer.

18.   A telecommunications data processing arrangement according to any of the preceding claims 1-15, characterized in that data processing software components are located in multiple processes on multiple computers.

10   19.   A telecommunications data processing arrangement according to any of the preceding claims 1-18, characterized in that different data processing components are combined together to build new data processing component clusters.

20.   A telecommunications data processing arrangement according to 15   Claim 19, characterized in that a data processing component cluster is multiple levels deep.

21.   A telecommunications data processing arrangement according to Claim 20, characterized in that a data processing component cluster contains other component clusters.

20   22.   A telecommunications data processing arrangement according to any of the preceding claims 1-21, characterized in that the generic components according to the present invention are made part of a reusable component library.

23. A method for setting up a telecommunications data processing arrangement in a telecommunications network, where the network elements (10)-(12) are producing event data used by different operational support systems (7)-(9), characterized in that the arrangement further comprises a data processing network element (13) for processing the input data from the network elements (10)-(12) and generating an output data towards the operational support systems (7)-(9), in which a flexible architecture between the data processing components, having a generic component interface, is set up by

- exporting the properties of the available data processing components within the telecommunications data processing arrangement, by
- parsing a configuration file (16) of the telecommunications data processing arrangement, and by
- linking the data processing components together at the startup-time of the telecommunications data processing arrangement.

24. A method according to Claim 23, characterized in that at the start-up of the data processing arrangement there is processed a component link-up configuration file (16), which dictates the internal build-up of the data processing components within the data processing arrangement.

25. A method according to Claim 23 or Claim 24, characterized in that the data processing components are linked together at the run-time of the telecommunications data processing arrangement.

26. A method according to Claim 25, characterized in that there is an external signal sent to the telecommunications data processing arrangement when the component link-up configuration file (16) needs to be re-read.

27. A method according to Claim 23 or Claim 25, characterized in that the components are listed in one or more component galleries based on the component name.

28. A method according to Claim 23, Claim 25 or Claim 27,
5 characterized in that the validity of a component link-up is checked based on the properties of the components in question.

29. A method according to any of the preceding claims 23-28, characterized in that the component link-up configuration file (16) is specified in a specially defined language.

10 30. A method according to any of the preceding claims 23-29, characterized in that different data processing components are combined together to build new data processing component clusters.

31. A method according to Claim 30, characterized in that a data processing component cluster is multiple levels deep.

15 32. A method according to Claim 31, characterized in that a data processing component cluster contains other component clusters.

33. A method according to any of the preceding claims 23-32, characterized in that the generic components according to the present invention are made part of a reusable component library.